TITLE I—ENERGY CONSERVATION

Subtitle A—Federal Leadership in Energy Conservation

SEC. 1001. ENERGY AND WATER SAVING MEASURES IN CONGRESSIONAL BUILDINGS.

(a) IN GENERAL.—Part 3 of title V of the National Energy Conservation Policy Act is amended by adding at the end:

"SEC. 552. ENERGY AND WATER SAVINGS MEASURES IN CONGRESSIONAL BUILDINGS.

''(a) IN GENERAL.—The Architect of the Capitol—

''(1) shall develop, update, and implement a cost-effective energy conservation and management plan (referred to in this section as the ''plan'') for all facilities administered by the Congress (referred to in this section as 'congressional buildings') to meet the energy performance requirements for Federal buildings established under section 543(a)(1); and

''(2) shall submit the plan to Congress, not later than 180 days after the date of enactment of this section.

''(b) PLAN REQUIREMENTS.—The plan shall include—

''(1) a description of the life cycle cost analysis used to determine the cost-effectiveness of proposed energy efficiency projects;

''(2) a schedule of energy surveys to ensure complete surveys of all congressional buildings every 5 years to determine the cost and payback period of energy and water conservation measures;

''(3) a strategy for installation of life cycle cost-effective energy and water conservation measures;

''(4) the results of a study of the costs and benefits of installation of submetering in congressional buildings; and

''(5) information packages and 'how-to' guides for each Member and employing authority of Congress that detail simple, cost-effective methods to save energy and taxpayer dollars in the workplace.

''(c) ANNUAL REPORT.—The Architect shall submit to Congress annually a report on congressional energy management and conservation programs required under this section that describes in detail—

''(1) energy expenditures and savings estimates for each facility;

''(2) energy management and conservation projects; and

''(3) future priorities to ensure compliance with this section.''.

(b) TABLE OF CONTENTS AMENDMENT.—The table of contents of the National Energy Conservation Policy Act is amended by adding at the end of the items relating to part 3 of title V the following new item:

''Sec. 552. Energy and water savings measures in congressional buildings.''.

(c) REPEAL.—Section 310 of the Legislative Branch Appropriations Act, 1999 (40 U.S.C. 166i), is repealed.

(d) ENERGY INFRASTRUCTURE.—The Architect of the Capitol, building on the Master Plan Study completed in July 2000, shall commission a study to evaluate the energy infrastructure of the Capital Complex to determine how the infrastructure could be augmented to become more energy efficient, using unconventional and renewable energy resources, in a way that would enable the Complex to have reliable utility service in the event of power fluctuations, shortages, or outages.

(e) AUTHORIZATION.—There are authorized to be appropriated to the Architect of the Capitol to carry out subsection (d), not more than $2,000,000 for fiscal years after the enactment of this Act.

SEC. 1002. ENERGY MANAGEMENT REQUIREMENTS.

(a) ENERGY REDUCTION GOALS.—

(1) AMENDMENT.—Section 543(a)(1) of the National Energy Conservation Policy Act (42 U.S.C.

8253(a)(1)) is amended by striking ''its Federal buildings so that'' and all that follows through the end and inserting ''the Federal buildings of the agency (including each industrial or laboratory facility) so that the energy consumption per gross square foot of the Federal buildings of the agency in fiscal years 2004 through 2013 is reduced, as compared with the energy consumption per gross square foot of the Federal buildings of the agency in fiscal year 2001, by the percentage specified in the following table:

''Fiscal Year	**Percentage reduction**
2004	2
2005	4
2006	6
2007	8
2008	10
2009	12
2010	14
2011	16
2012	18
2013	20.''.

(2) REPORTING BASELINE.—The energy reduction goals and baseline established in paragraph (1) of section 543(a) of the National Energy Conservation Policy Act, as amended by paragraph (1) of this subsection, supersede all previous goals and baselines under such paragraph, and related reporting requirements.

(b) REVIEW AND REVISION OF ENERGY PERFORMANCE REQUIREMENT.—Section 543(a) of the National

Energy Conservation Policy Act (42 U.S.C. 8253(a)) is further amended by adding at the end the following:

''(3) Not later than December 31, 2012, the Secretary shall review the results of the implementation of the energy performance requirement established under paragraph (1) and submit to Congress recommendations concerning energy performance requirements for fiscal years 2014 through 2023.''.

(c) EXCLUSIONS.—Section 543(c)(1) of the National Energy Conservation Policy Act (42 U.S.C. 8253(c)(1)) is amended by striking ''An agency may exclude'' and all that follows through the end and inserting ''(A) An agency may exclude, from the energy performance requirement for a fiscal year established under subsection (a) and the energy management requirement established under subsection (b), any Federal building or collection of Federal buildings, if the head of the agency finds that—

''(i) compliance with those requirements would be impracticable;

''(ii) the agency has completed and submitted all federally required energy management reports;

''(iii) the agency has achieved compliance with the energy efficiency requirements of this Act, the Energy Policy Act of 1992, Executive Orders, and other Federal law; and

''(iv) the agency has implemented all practicable, life cycle cost-effective projects with respect to the Federal building or collection of Federal buildings to be excluded.

''(B) A finding of impracticability under subparagraph (A)(i) shall be based on—

''(i) the energy intensiveness of activities carried out in the Federal building or collection of Federal buildings; or

''(ii) the fact that the Federal building or collection of Federal buildings is used in the performance of a national security function.''.

(d) REVIEW BY SECRETARY.—Section 543(c)(2) of the National Energy Conservation Policy Act (42 U.S.C. 8253(c)(2)) is amended—

(1) by striking ''impracticability standards'' and inserting ''standards for exclusion''; and

(2) by striking ''a finding of impracticability'' and inserting ''the exclusion''.

(e) CRITERIA.—Section 543(c) of the National Energy Conservation Policy Act (42 U.S.C. 8253(c)) is further amended by adding at the end the following:

''(3) Not later than 180 days after the date of enactment of this paragraph, the Secretary shall issue guide-

lines that establish criteria for exclusions under paragraph (1).''.

(f) RETENTION OF ENERGY SAVINGS.—Section 546 of the National Energy Conservation Policy Act (42 U.S.C. 8256) is amended by adding at the end the following new subsection:

''(e) RETENTION OF ENERGY SAVINGS.—An agency may retain any funds appropriated to that agency for energy expenditures, at buildings subject to the requirements of section 543(a) and (b), that are not made because of energy savings. Except as otherwise provided by law, such funds may be used only for energy efficiency or unconventional and renewable energy resources projects.''.

(g) REPORTS.—Section 548(b) of the National Energy Conservation Policy Act (42 U.S.C. 8258(b)) is amended—

(1) in the subsection heading, by inserting ''THE PRESIDENT AND'' before ''CONGRESS''; and

(2) by inserting ''President and'' before ''Congress''.

(h) CONFORMING AMENDMENT.—Section 550(d) of the National Energy Conservation Policy Act (42 U.S.C. 8258b(d)) is amended in the second sentence by striking ''the 20 percent reduction goal established under section 543(a) of the National Energy Conservation Policy Act

(42 U.S.C. 8253(a)).'' and inserting ''each of the energy reduction goals established under section 543(a).''.

SEC. 1003. ENERGY USE MEASUREMENT AND ACCOUNTABILITY.

Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is further amended by adding at the end the following:

''(e) METERING OF ENERGY USE.—

''(1) DEADLINE.—By October 1, 2010, in accordance with guidelines established by the Secretary under paragraph (2), all Federal buildings shall, for the purposes of efficient use of energy and reduction in the cost of electricity used in such buildings, be metered or submetered. Each agency shall use, to the maximum extent practicable, advanced meters or advanced metering devices that provide data at least daily and that measure at least hourly consumption of electricity in the Federal buildings of the agency. Such data shall be incorporated into existing Federal energy tracking systems and made available to Federal facility energy managers.

''(2) GUIDELINES.—

''(A) IN GENERAL.—Not later than 180 days after the date of enactment of this sub-

section, the Secretary, in consultation with the Department of Defense, the General Services Administration, representatives from the metering industry, utility industry, energy services industry, energy efficiency industry, national laboratories, universities, and Federal facility energy managers, shall establish guidelines for agencies to carry out paragraph (1).

''(B) REQUIREMENTS FOR GUIDELINES.—The guidelines shall—

''(i) take into consideration—

''(I) the cost of metering and submetering and the reduced cost of operation and maintenance expected to result from metering and submetering;

''(II) the extent to which metering and submetering are expected to result in increased potential for energy management, increased potential for energy savings and energy efficiency improvement, and cost and energy savings due to utility contract aggregation; and

''(III) the measurement and verification protocols of the Department of Energy;

''(ii) include recommendations concerning the amount of funds and the number of trained personnel necessary to gather and use the metering information to track and reduce energy use;

''(iii) establish priorities for types and locations of buildings to be metered and submetered based on cost-effectiveness and a schedule of one or more dates, not later than 1 year after the date of issuance of the guidelines, on which the requirements specified in paragraph (1) shall take effect; and

''(iv) establish exclusions from the requirements specified in paragraph (1) based on the de minimis quantity of energy use of a Federal building, industrial process, or structure.

''(3) PLAN.—No later than 6 months after the date guidelines are established under paragraph (2), in a report submitted by the agency under section 548(a), each agency shall submit to the Secretary a

plan describing how the agency will implement the requirements of paragraph (1), including (A) how the agency will designate personnel primarily responsible for achieving the requirements and (B) demonstration by the agency, complete with documentation, of any finding that advanced meters or advanced metering devices, as defined in paragraph (1), are not practicable.''.

SEC. 1004. FEDERAL BUILDING PERFORMANCE STANDARDS.

Section 305(a) of the Energy Conservation and Production Act (42 U.S.C. 6834(a)) is amended—

(1) in paragraph (2)(A), by striking ''CABO Model Energy Code, 1992'' and inserting ''the 2000 International Energy Conservation Code''; and

(2) by adding at the end the following:

''(3) REVISED FEDERAL BUILDING ENERGY EFFICIENCY PERFORMANCE STANDARDS.—

''(A) IN GENERAL.—Not later than 1 year after the date of enactment of this paragraph, the Secretary of Energy shall establish, by rule, revised Federal building energy efficiency performance standards that require that, if cost-effective, for new Federal buildings—

''(i) such buildings be designed so as to achieve energy consumption levels at least 30 percent below those of the most recent ASHRAE Standard 90.1 or the most recent version of the International Energy Conservation Code, as appropriate; and

''(ii) sustainable design principles are applied to the siting, design, and construction of all new and replacement buildings.

''(B) ADDITIONAL REVISIONS.—Not later than 1 year after the date of approval of amendments to ASHRAE Standard 90.1 or the 2000 International Energy Conservation Code, the Secretary of Energy shall determine, based on the cost-effectiveness of the requirements under the amendments, whether the revised standards established under this paragraph should be updated to reflect the amendments.

''(C) STATEMENT ON COMPLIANCE OF NEW BUILDINGS.—In the budget request of the Federal agency for each fiscal year and each report submitted by the Federal agency under section 548(a) of the National Energy Conservation Policy Act (42 U.S.C. 8258(a)), the head of each Federal agency shall include—

''(i) a list of all new Federal buildings owned, operated, or controlled by the Federal agency; and

''(ii) a statement concerning whether the Federal buildings meet or exceed the revised standards established under this paragraph.''.

SEC. 1005. PROCUREMENT OF ENERGY EFFICIENT PRODUCTS.

(a) REQUIREMENTS.—Part 3 of title V of the National Energy Conservation Policy Act is amended by adding at the end the following:

''SEC. 553. FEDERAL PROCUREMENT OF ENERGY EFFICIENT PRODUCTS.

''(a) DEFINITIONS.—In this section:

''(1) ENERGY STAR PRODUCT.—The term 'Energy Star product' means a product that is rated for energy efficiency under an Energy Star program.

''(2) ENERGY STAR PROGRAM.—The term 'Energy Star program' means the program established by section 324A of the Energy Policy and Conservation Act.

''(3) EXECUTIVE AGENCY.—The term 'executive agency' has the meaning given the term in section 4 of the Office of Federal Procurement Policy Act (41 U.S.C. 403).

''(4) FEMP DESIGNATED PRODUCT.—The term 'FEMP designated product' means a product that is designated under the Federal Energy Management Program of the Department of Energy as being among the highest 25 percent of equivalent products for energy efficiency.

''(b) PROCUREMENT OF ENERGY EFFICIENT PRODUCTS.—

''(1) REQUIREMENT.—To meet the requirements of an executive agency for an energy consuming product, the head of the executive agency shall, except as provided in paragraph (2), procure—

''(A) an Energy Star product; or

''(B) a FEMP designated product.

''(2) EXCEPTIONS.—The head of an executive agency is not required to procure an Energy Star product or FEMP designated product under paragraph (1) if the head of the executive agency finds in writing that—

''(A) an Energy Star product or FEMP designated product is not cost-effective over the life of the product taking energy cost savings into account; or

''(B) no Energy Star product or FEMP designated product is reasonably available that

meets the functional requirements of the executive agency.

''(3) PROCUREMENT PLANNING.—The head of an executive agency shall incorporate into the specifications for all procurements involving energy consuming products and systems, including guide specifications, project specifications, and construction, renovation, and services contracts that include provision of energy consuming products and systems, and into the factors for the evaluation of offers received for the procurement, criteria for energy efficiency that are consistent with the criteria used for rating Energy Star products and for rating FEMP designated products.

''(c) LISTING OF ENERGY EFFICIENT PRODUCTS IN FEDERAL CATALOGS.—Energy Star products and FEMP designated products shall be clearly identified and prominently displayed in any inventory or listing of products by the General Services Administration or the Defense Logistics Agency. The General Services Administration or the Defense Logistics Agency shall supply only Energy Star products or FEMP designated products for all product categories covered by the Energy Star program or the Federal Energy Management Program, except in cases where the agency ordering a product specifies in writing

that no Energy Star product or FEMP designated product is available to meet the buyer's functional requirements, or that no Energy Star product or FEMP designated product is cost-effective for the intended application over the life of the product, taking energy cost savings into account.

''(d) DESIGNATION OF ELECTRIC MOTORS.—In the case of electric motors of 1 to 500 horsepower, agencies shall select only premium efficient motors that meet a standard designated by the Secretary. The Secretary shall designate such a standard within 120 days after the date of the enactment of this section, after considering the recommendations of associated electric motor manufacturers and energy efficiency groups.

''(e) REGULATIONS.—Not later than 180 days after the date of the enactment of this section, the Secretary shall issue guidelines to carry out this section.''.

(b) CONFORMING AMENDMENT.—The table of contents in section 1(b) of the National Energy Conservation Policy Act (42 U.S.C. 8201 note) is amended by inserting after the item relating to section 551 the following:

''Sec. 553. Federal procurement of energy efficient products.''.

SEC. 1006. ENERGY SAVINGS PERFORMANCE CONTRACTS.

(a) PERMANENT EXTENSION.—Section 801(c) of the National Energy Conservation Policy Act (42 U.S.C. 8287(c)) is repealed.

(b) REPLACEMENT FACILITIES.—Section 801(a) of the National Energy Conservation Policy Act (42 U.S.C. 8287(a)) is amended by adding at the end the following new paragraph:

''(3)(A) In the case of an energy savings contract or energy savings performance contract providing for energy savings through the construction and operation of one or more buildings or facilities to replace one or more existing buildings or facilities, benefits ancillary to the purpose of such contract under paragraph (1) may include savings resulting from reduced costs of operation and maintenance at such replacement buildings or facilities when compared with costs of operation and maintenance at the buildings or facilities being replaced, established through a methodology set forth in the contract.

''(B) Notwithstanding paragraph (2)(B), aggregate annual payments by an agency under an energy savings contract or energy savings performance contract referred to in subparagraph (A) may take into account (through the procedures developed pursuant to this section) savings resulting from reduced costs of operation and maintenance as described in that subparagraph.''.

(c) ENERGY SAVINGS.—Section 804(2) of the National Energy Conservation Policy Act (42 U.S.C. 8287c(2)) is amended to read as follows:

''(2) The term 'energy savings' means—

''(A) a reduction in the cost of energy or water, from a base cost established through a methodology set forth in the contract, used in an existing federally owned building or buildings or other federally owned facilities as a result of—

''(i) the lease or purchase of operating equipment, improvements, altered operation and maintenance, or technical services;

'''(ii) the increased efficient use of existing energy sources by cogeneration or heat recovery, excluding any cogeneration process for other than a federally owned building or buildings or other federally owned facilities; or

''(iii) the increased efficient use of existing water sources; or

''(B) in the case of a replacement building or facility described in section 801(a)(3), a reduction in the cost of energy, from a base cost

established through a methodology set forth in the contract, that would otherwise be utilized in one or more existing federally owned buildings or other federally owned facilities by reason of the construction and operation of the replacement building or facility.''.

(d) ENERGY SAVINGS CONTRACT.—Section 804(3) of the National Energy Conservation Policy Act (42 U.S.C. 8287c(3)) is amended to read as follows:

''(3) The terms 'energy savings contract' and 'energy savings performance contract' mean a contract which provides for—

''(A) the performance of services for the design, acquisition, installation, testing, operation, and, where appropriate, maintenance and repair, of an identified energy or water conservation measure or series of measures at one or more locations; or

''(B) energy savings through the construction and operation of one or more buildings or facilities to replace one or more existing buildings or facilities.

Such contracts shall, with respect to an agency facility that is a public building as such term is defined in section 13(1) of the Public Buildings Act of 1959

(40 U.S.C. 612(1)), be in compliance with the prospectus requirements and procedures of section 7 of the Public Buildings Act of 1959 (40 U.S.C. 606).''.

(e) ENERGY OR WATER CONSERVATION MEASURE.—Section 804(4) of the National Energy Conservation Policy Act (42 U.S.C. 8287c(4)) is amended to read as follows:

''(4) The term 'energy or water conservation measure' means—

''(A) an energy conservation measure, as defined in section 551(4) (42 U.S.C. 8259(4)); or

''(B) a water conservation measure that improves water efficiency, is life cycle cost-effective, and involves water conservation, water recycling or reuse, more efficient treatment of wastewater or stormwater, improvements in operation or maintenance efficiencies, retrofit activities, or other related activities, not at a Federal hydroelectric facility.''.

(f) REVIEW.—Within 180 days after the date of the enactment of this section, the Secretary of Energy shall complete a review of the Energy Savings Performance Contract program to identify statutory, regulatory, and administrative obstacles that prevent Federal agencies

from fully utilizing the program. In addition, this review shall identify all areas for increasing program flexibility and effectiveness, including audit and measurement verification requirements, accounting for energy use in determining savings, contracting requirements, and energy efficiency services covered. The Secretary shall report these findings to the Committee on Energy and Commerce of the House of Representatives and the Committee on Energy and Natural Resources of the Senate, and shall implement identified administrative and regulatory changes to increase program flexibility and effectiveness to the extent that such changes are consistent with statutory authority.

SEC. 1007. VOLUNTARY COMMITMENTS TO REDUCE INDUSTRIAL ENERGY INTENSITY.

(a) VOLUNTARY AGREEMENTS.—The Secretary of Energy shall enter into voluntary agreements with one or more persons in industrial sectors that consume significant amounts of primary energy per unit of physical output to reduce the energy intensity of their production activities.

(b) GOAL.—Voluntary agreements under this section shall have a goal of reducing energy intensity by not less than 2.5 percent each year from 2004 through 2014.

(c) RECOGNITION.—The Secretary of Energy, in cooperation with the Administrator of the Environmental Protection Agency and other appropriate Federal agencies, shall develop mechanisms to recognize and publicize the achievements of participants in voluntary agreements under this section.

(d) DEFINITION.—In this section, the term ''energy intensity'' means the primary energy consumed per unit of physical output in an industrial process.

(e) TECHNICAL ASSISTANCE.—An entity that enters into an agreement under this section and continues to make a good faith effort to achieve the energy efficiency goals specified in the agreement shall be eligible to receive from the Secretary a grant or technical assistance as appropriate to assist in the achievement of those goals.

(f) REPORT.—Not later than June 30, 2010 and June 30, 2014, the Secretary shall submit to Congress a report that evaluates the success of the voluntary agreements, with independent verification of a sample of the energy savings estimates provided by participating firms.

SEC. 1008. FEDERAL AGENCY PARTICIPATION IN DEMAND REDUCTION PROGRAMS.

Section 546(c) of the National Energy Conservation Policy Act (42 U.S.C. 8256(c)) is amended by adding at the end of the following new paragraph:

''(6) Federal agencies are encouraged to participate in State or regional demand side reduction programs. The availability of such programs, including measures employing onsite generation, and the savings resulting from such participation, should be included in the evaluation of energy options for Federal facilities.''.

SEC. 1009. ADVANCED BUILDING EFFICIENCY TESTBED.

(a) ESTABLISHMENT.—The Secretary of Energy, in consultation with the Administrator of the General Services Administration, shall establish an Advanced Building Efficiency Testbed program for the development, testing, and demonstration of advanced engineering systems, components, and materials to enable innovations in building technologies. The program shall evaluate efficiency concepts for government and industry buildings, and demonstrate the ability of next generation buildings to support individual and organizational productivity and health as well as flexibility and technological change to improve environmental sustainability. Such program shall complement and not duplicate existing national programs.

(b) PARTICIPANTS.—The program established under subsection (a) shall be led by a university with the ability to combine the expertise from numerous academic fields including, at a minimum, intelligent workplaces and advanced building systems and engineering, electrical and

computer engineering, computer science, architecture, urban design, and environmental and mechanical engineering. Such university shall partner with other universities and entities who have established programs and the capability of advancing innovative building efficiency technologies.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary of Energy to carry out this section $6,000,000 for each of the fiscal years 2004 through 2006, to remain available until expended. For any fiscal year in which funds are expended under this section, the Secretary shall provide one-third of the total amount to the lead university described in subsection (b), and provide the remaining two-thirds to the other participants referred to in subsection (b) on an equal basis.

SEC. 1010. INCREASED USE OF RECOVERED MINERAL COMPONENT IN FEDERALLY FUNDED PROJECTS INVOLVING PROCUREMENT OF CEMENT OR CONCRETE.

(a) AMENDMENT.—Subtitle F of the Solid Waste Disposal Act (42 U.S.C. 6961 et seq.) is amended by adding at the end the following new section:

''INCREASED USE OF RECOVERED MINERAL COMPONENT IN FEDERALLY FUNDED PROJECTS INVOLVING PROCUREMENT OF CEMENT OR CONCRETE

''SEC. 6005. (a) DEFINITIONS.—In this section:

''(1) AGENCY HEAD.—The term 'agency head' means—

''(A) the Secretary of Transportation; and

''(B) the head of each other Federal agency that on a regular basis procures, or provides Federal funds to pay or assist in paying the cost of procuring, material for cement or concrete projects.

''(2) CEMENT OR CONCRETE PROJECT.—The term 'cement or concrete project' means a project for the construction or maintenance of a highway or other transportation facility or a Federal, State, or local government building or other public facility that—

''(A) involves the procurement of cement or concrete; and

''(B) is carried out in whole or in part using Federal funds.

''(3) RECOVERED MINERAL COMPONENT.—The term 'recovered mineral component' means—

''(A) ground granulated blast furnace slag;

''(B) coal combustion fly ash; and

''(C) any other waste material or byproduct recovered or diverted from solid waste that the Administrator, in consultation with an agency head, determines should be treated as recovered mineral component under this section for use in cement or concrete projects paid for, in whole or in part, by the agency head.

''(b) IMPLEMENTATION OF REQUIREMENTS.—

''(1) IN GENERAL.—Not later than 1 year after the date of enactment of this section, the Administrator and each agency head shall take such actions as are necessary to implement fully all procurement requirements and incentives in effect as of the date of enactment of this section (including guidelines under section 6002) that provide for the use of cement and concrete incorporating recovered mineral component in cement or concrete projects.

''(2) PRIORITY.—In carrying out paragraph (1) an agency head shall give priority to achieving greater use of recovered mineral component in cement or concrete projects for which recovered mineral components historically have not been used or have been used only minimally.

''(3) CONFORMANCE.—The Administrator and each agency head shall carry out this subsection in accordance with section 6002.

''(c) FULL IMPLEMENTATION STUDY.—

''(1) IN GENERAL.—The Administrator, in cooperation with the Secretary of Transportation and the Secretary of Energy, shall conduct a study to determine the extent to which current procurement requirements, when fully implemented in accordance with subsection (b), may realize energy savings and environmental benefits attainable with substitution of recovered mineral component in cement used in cement or concrete projects.

''(2) MATTERS TO BE ADDRESSED.—The study shall—

''(A) quantify the extent to which recovered mineral components are being substituted for Portland cement, particularly as a result of current procurement requirements, and the energy savings and environmental benefits associated with that substitution;

''(B) identify all barriers in procurement requirements to fuller realization of energy savings and environmental benefits, including bar-

riers resulting from exceptions from current law; and

''(C)(i) identify potential mechanisms to achieve greater substitution of recovered mineral component in types of cement or concrete projects for which recovered mineral components historically have not been used or have been used only minimally;

''(ii) evaluate the feasibility of establishing guidelines or standards for optimized substitution rates of recovered mineral component in those cement or concrete projects; and

''(iii) identify any potential environmental or economic effects that may result from greater substitution of recovered mineral component in those cement or concrete projects.

''(3) REPORT.—Not later than 30 months after the date of enactment of this section, the Administrator shall submit to the Committee on Appropriations and Committee on Environment and Public Works of the Senate and the Committee on Appropriations, Committee on Energy and Commerce, and Committee on Transportation and Infrastructure of the House of Representatives a report on the study.

''(d) ADDITIONAL PROCUREMENT REQUIREMENTS.—Unless the study conducted under subsection (c) identifies any effects or other problems described in subsection (c)(2)(C)(iii) that warrant further review or delay, the Administrator and each agency head shall, within 1 year of the release of the report in accordance with subsection (c)(3), take additional actions authorized under this Act to establish procurement requirements and incentives that provide for the use of cement and concrete with increased substitution of recovered mineral component in the construction and maintenance of cement or concrete projects, so as to—

''(1) realize more fully the energy savings and environmental benefits associated with increased substitution; and

''(2) eliminate barriers identified under subsection (c).

''(e) EFFECT OF SECTION.—Nothing in this section affects the requirements of section 6002 (including the guidelines and specifications for implementing those requirements).''.

(b) TABLE OF CONTENTS AMENDMENT.—The table of contents of the Solid Waste Disposal Act is amended by adding after the item relating to section 6004 the following new item:

''Sec. 6005. Increased use of recovered mineral component in federally funded projects involving procurement of cement or concrete.''.

Subtitle B—Energy Assistance and State Programs

SEC. 1021. LIHEAP AND WEATHERIZATION ASSISTANCE.

(a) LOW-INCOME HOME ENERGY ASSISTANCE PROGRAM.—Section 2602(b) of the Low-Income Home Energy Assistance Act of 1981 (42 U.S.C. 8621(b)) is amended by striking ''each of fiscal years 2002 through 2004'' and inserting ''each of fiscal years 2002 and 2003, and $3,400,000,000 for each of fiscal years 2004 through 2006''.

(b) WEATHERIZATION.—Section 422 of the Energy Conservation and Production Act (42 U.S.C. 6872) is amended by striking ''for fiscal years 1999 through 2003 such sums as may be necessary'' and inserting ''$325,000,000 for fiscal year 2004, $400,000,000 for fiscal year 2005, and $500,000,000 for fiscal year 2006''.

SEC. 1022. STATE ENERGY PROGRAMS.

(a) STATE ENERGY CONSERVATION PLANS.—Section 362 of the Energy Policy and Conservation Act (42 U.S.C. 6322) is amended by inserting at the end the following new subsection:

''(g) The Secretary shall, at least once every 3 years, invite the Governor of each State to review and, if necessary, revise the energy conservation plan of such State

submitted under subsection (b) or (e). Such reviews should consider the energy conservation plans of other States within the region, and identify opportunities and actions carried out in pursuit of common energy conservation goals.''.

(b) STATE ENERGY EFFICIENCY GOALS.—Section 364 of the Energy Policy and Conservation Act (42 U.S.C. 6324) is amended to read as follows:

''STATE ENERGY EFFICIENCY GOALS

''SEC. 364. Each State energy conservation plan with respect to which assistance is made available under this part on or after the date of enactment of the Energy Policy Act of 2003 shall contain a goal, consisting of an improvement of 25 percent or more in the efficiency of use of energy in the State concerned in calendar year 2010 as compared to calendar year 1990, and may contain interim goals.''.

(c) AUTHORIZATION OF APPROPRIATIONS.—Section 365(f) of the Energy Policy and Conservation Act (42 U.S.C. 6325(f)) is amended by striking ''for fiscal years 1999 through 2003 such sums as may be necessary'' and inserting ''$100,000,000 for each of the fiscal years 2004 and 2005 and $125,000,000 for fiscal year 2006''.

SEC. 1023. ENERGY EFFICIENT APPLIANCE REBATE PROGRAMS.

(a) DEFINITIONS.—In this section:

(1) ELIGIBLE STATE.—The term ''eligible State'' means a State that meets the requirements of subsection (b).

(2) ENERGY STAR PROGRAM.—The term ''Energy Star program'' means the program established by section 324A of the Energy Policy and Conservation Act.

(3) RESIDENTIAL ENERGY STAR PRODUCT.—The term ''residential Energy Star product'' means a product for a residence that is rated for energy efficiency under the Energy Star program.

(4) STATE ENERGY OFFICE.—The term ''State energy office'' means the State agency responsible for developing State energy conservation plans under section 362 of the Energy Policy and Conservation Act (42 U.S.C. 6322).

(5) STATE PROGRAM.—The term ''State program'' means a State energy efficient appliance rebate program described in subsection (b)(1).

(b) ELIGIBLE STATES.—A State shall be eligible to receive an allocation under subsection (c) if the State—

(1) establishes (or has established) a State energy efficient appliance rebate program to provide rebates to residential consumers for the purchase of

residential Energy Star products to replace used appliances of the same type;

(2) submits an application for the allocation at such time, in such form, and containing such information as the Secretary may require; and

(3) provides assurances satisfactory to the Secretary that the State will use the allocation to supplement, but not supplant, funds made available to carry out the State program.

(c) AMOUNT OF ALLOCATIONS.—

(1) IN GENERAL.—Subject to paragraph (2), for each fiscal year, the Secretary shall allocate to the State energy office of each eligible State to carry out subsection (d) an amount equal to the product obtained by multiplying the amount made available under subsection (f) for the fiscal year by the ratio that the population of the State in the most recent calendar year for which data are available bears to the total population of all eligible States in that calendar year.

(2) MINIMUM ALLOCATIONS.—For each fiscal year, the amounts allocated under this subsection shall be adjusted proportionately so that no eligible State is allocated a sum that is less than an amount determined by the Secretary.

(d) USE OF ALLOCATED FUNDS.—The allocation to a State energy office under subsection (c) may be used to pay up to 50 percent of the cost of establishing and carrying out a State program.

(e) ISSUANCE OF REBATES.—Rebates may be provided to residential consumers that meet the requirements of the State program. The amount of a rebate shall be determined by the State energy office, taking into consideration—

(1) the amount of the allocation to the State energy office under subsection (c);

(2) the amount of any Federal or State tax incentive available for the purchase of the residential Energy Star product; and

(3) the difference between the cost of the residential Energy Star product and the cost of an appliance that is not a residential Energy Star product, but is of the same type as, and is the nearest capacity, performance, and other relevant characteristics (as determined by the State energy office) to the residential Energy Star product.

(f) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section $50,000,000 for each of the fiscal years 2004 through 2008.

SEC. 1024. ENERGY EFFICIENT PUBLIC BUILDINGS.

(a) GRANTS.—The Secretary of Energy may make grants to the State agency responsible for developing State energy conservation plans under section 362 of the Energy Policy and Conservation Act (42 U.S.C. 6322), or, if no such agency exists, a State agency designated by the Governor of the State, to assist units of local government in the State in improving the energy efficiency of public buildings and facilities—

(1) through construction of new energy efficient public buildings that use at least 30 percent less energy than a comparable public building constructed in compliance with standards prescribed in chapter 8 of the 2000 International Energy Conservation Code, or a similar State code intended to achieve substantially equivalent efficiency levels; or

(2) through renovation of existing public buildings to achieve reductions in energy use of at least 30 percent as compared to the baseline energy use in such buildings prior to renovation, assuming a 3-year, weather-normalized average for calculating such baseline.

(b) ADMINISTRATION.—State energy offices receiving grants under this section shall—

(1) maintain such records and evidence of compliance as the Secretary may require; and

(2) develop and distribute information and materials and conduct programs to provide technical services and assistance to encourage planning, financing, and design of energy efficient public buildings by units of local government.

(c) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section, there are authorized to be appropriated to the Secretary of Energy such sums as may be necessary for each of fiscal years 2004 through 2013. Not more than 30 percent of appropriated funds shall be used for administration.

SEC. 1025. LOW INCOME COMMUNITY ENERGY EFFICIENCY PILOT PROGRAM.

(a) GRANTS.—The Secretary of Energy is authorized to make grants to units of local government, private, nonprofit community development organizations, and Indian tribe economic development entities to improve energy efficiency, identify and develop alternative renewable and distributed energy supplies, and increase energy conservation in low income rural and urban communities.

(b) PURPOSE OF GRANTS.—The Secretary may make grants on a competitive basis for—

(1) investments that develop alternative renewable and distributed energy supplies;

(2) energy efficiency projects and energy conservation programs;

(3) studies and other activities that improve energy efficiency in low income rural and urban communities;

(4) planning and development assistance for increasing the energy efficiency of buildings and facilities; and

(5) technical and financial assistance to local government and private entities on developing new renewable and distributed sources of power or combined heat and power generation.

(c) DEFINITION.—For purposes of this section, the term ''Indian tribe'' means any Indian tribe, band, nation, or other organized group or community, including any Alaskan Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.), which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

(d) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section there are authorized to be appropriated to the Secretary of Energy $20,000,000 for fiscal

year 2004 and each fiscal year thereafter through fiscal year 2006.

Subtitle C—Energy Efficient Products

SEC. 1041. ENERGY STAR PROGRAM.

(a) AMENDMENT.—The Energy Policy and Conservation Act (42 U.S.C. 6201 and following) is amended by inserting the following after section 324:

"SEC. 324A. ENERGY STAR PROGRAM.

''There is established at the Department of Energy and the Environmental Protection Agency a program to identify and promote energy-efficient products and buildings in order to reduce energy consumption, improve energy security, and reduce pollution through labeling of and other forms of communication about products and buildings that meet the highest energy efficiency standards. Responsibilities under the program shall be divided between the Department of Energy and the Environmental Protection Agency consistent with the terms of agreements between the two agencies. The Administrator and the Secretary shall—

''(1) promote Energy Star compliant technologies as the preferred technologies in the marketplace for achieving energy efficiency and to reduce pollution;

''(2) work to enhance public awareness of the Energy Star label, including special outreach to small businesses;

''(3) preserve the integrity of the Energy Star label; and

''(4) solicit the comments of interested parties in establishing a new Energy Star product category or in revising a product category, and upon adoption of a new or revised product category provide an explanation of the decision that responds to significant public comments.''.

(b) TABLE OF CONTENTS AMENDMENT.—The table of contents of the Energy Policy and Conservation Act is amended by inserting after the item relating to section 324 the following new item:

''Sec. 324A. Energy Star program.''.

SEC. 1042. CONSUMER EDUCATION ON ENERGY EFFICIENCY BENEFITS OF AIR CONDITIONING, HEATING, AND VENTILATION MAINTENANCE.

Section 337 of the Energy Policy and Conservation Act (42 U.S.C. 6307) is amended by adding at the end the following:

''(c) HVAC MAINTENANCE.—(1) For the purpose of ensuring that installed air conditioning and heating systems operate at their maximum rated efficiency levels, the

Secretary shall, within 180 days of the date of enactment of this subsection, carry out a program to educate homeowners and small business owners concerning the energy savings resulting from properly conducted maintenance of air conditioning, heating, and ventilating systems.

''(2) The Secretary shall carry out the program in cooperation with the Administrator of the Environmental Protection Agency and such other entities as the Secretary considers appropriate, including industry trade associations, industry members, and energy efficiency organizations.

''(d) SMALL BUSINESS EDUCATION AND ASSISTANCE.—The Administrator of the Small Business Administration, in consultation with the Secretary of Energy and the Administrator of the Environmental Protection Agency, shall develop and coordinate a Government-wide program, building on the existing Energy Star for Small Business Program, to assist small business to become more energy efficient, understand the cost savings obtainable through efficiencies, and identify financing options for energy efficiency upgrades. The Secretary and the Administrator shall make the program information available directly to small businesses and through other Federal agencies, including the Federal Emergency Management Agency, and the Department of Agriculture.''.

SEC. 1043. ADDITIONAL DEFINITIONS.

Section 321 of the Energy Policy and Conservation Act (42 U.S.C. 6291) is amended by adding at the end the following:

''(32) The term 'battery charger' means a device that charges batteries for consumer products.

''(33) The term 'commercial refrigerator, freezer and refrigerator-freezer' means a refrigerator, freezer or refrigerator-freezer that—

''(A) is not a consumer product regulated under this Act; and

''(B) incorporates most components involved in the vapor-compression cycle and the refrigerated compartment in a single package.

''(34) The term 'external power supply' means an external power supply circuit that is used to convert household electric current into either DC current or lower-voltage AC current to operate a consumer product.

''(35) The term 'illuminated exit sign' means a sign that—

''(A) is designed to be permanently fixed in place to identify an exit; and

''(B) consists of—

''(i) an electrically powered integral light source that illuminates the legend 'EXIT' and any directional indicators; and

''(ii) provides contrast between the legend, any directional indicators, and the background.

''(36)(A) Except as provided in subparagraph (B), the term 'low-voltage dry-type transformer' means a transformer that—

''(i) has an input voltage of 600 volts or less;

''(ii) is air-cooled;

''(iii) does not use oil as a coolant; and

''(iv) is rated for operation at a frequency of 60 Hertz.

''(B) The term 'low-voltage dry-type transformer' does not include—

''(i) transformers with multiple voltage taps, with the highest voltage tap equaling at least 20 percent more than the lowest voltage tap;

''(ii) transformers that are designed to be used in a special purpose application, such as transformers commonly known as drive transformers, rectifier transformers,

autotransformers, Uninterruptible Power System transformers, impedance transformers, harmonic transformers, regulating transformers, sealed and nonventilating transformers, machine tool transformers, welding transformers, grounding transformers, or testing transformers; or

''(iii) any transformer not listed in clause (ii) that is excluded by the Secretary by rule because the transformer is designed for a special application and the application of standards to the transformer would not result in significant energy savings.

''(37) The term 'standby mode' means the lowest amount of electric power used by a household appliance when not performing its active functions, as defined on an individual product basis by the Secretary.

''(38) The term 'torchiere' means a portable electric lamp with a reflector bowl that directs light upward so as to give indirect illumination.

''(39) The term 'transformer' means a device consisting of two or more coils of insulated wire that transfers alternating current by electromagnetic in-

duction from one coil to another to change the original voltage or current value.

''(40) The term 'unit heater' means a self-contained fan-type heater designed to be installed within the heated space, except that such term does not include a warm air furnace.

''(41) The term 'traffic signal module' means a standard 8-inch (200mm) or 12-inch (300mm) traffic signal indication, consisting of a light source, a lens, and all other parts necessary for operation, that communicates movement messages to drivers through red, amber, and green colors.''.

SEC. 1044. ADDITIONAL TEST PROCEDURES.

(a) EXIT SIGNS.—Section 323(b) of the Energy Policy and Conservation Act (42 U.S.C. 6293) is amended by adding at the end the following:

''(9) Test procedures for illuminated exit signs shall be based on the test method used under Version 2.0 of the Energy Star program of the Environmental Protection Agency for illuminated exit signs.

''(10) Test procedures for low voltage dry-type distribution transformers shall be based on the 'Standard Test Method for Measuring the Energy Consumption of Distribution Transformers' prescribed by the National Electrical Manufacturers As-

sociation (NEMA TP 2–1998). The Secretary may review and revise this test procedure based on future revisions to such standard test method.

''(11) Test procedures for traffic signal modules shall be based on the test method used under the Energy Star program of the Environmental Protection Agency for traffic signal modules, as in effect on the date of enactment of this paragraph.''.

(b) ADDITIONAL CONSUMER AND COMMERCIAL PRODUCTS.—Section 323 of the Energy Policy and Conservation Act (42 U.S.C. 6293) is further amended by adding at the end the following:

''(f) ADDITIONAL CONSUMER AND COMMERCIAL PRODUCTS.—The Secretary shall within 24 months after the date of enactment of this subsection prescribe testing requirements for suspended ceiling fans, refrigerated bottled or canned beverage vending machines, commercial unit heaters, and commercial refrigerators, freezers and refrigerator-freezers. Such testing requirements shall be based on existing test procedures used in industry to the extent practical and reasonable. In the case of suspended ceiling fans, such test procedures shall include efficiency at both maximum output and at an output no more than 50 percent of the maximum output.''.

SEC. 1045. ENERGY CONSERVATION STANDARDS FOR ADDITIONAL CONSUMER AND COMMERCIAL PRODUCTS.

Section 325 of the Energy Policy and Conservation Act (42 U.S.C. 6295) is amended by adding at the end the following:

''(u) STANDBY MODE ELECTRIC ENERGY CONSUMPTION.—

''(1) INITIAL RULEMAKING.—(A) The Secretary shall, within 18 months after the date of enactment of this subsection, prescribe by notice and comment, definitions of standby mode and test procedures for the standby mode power use of battery chargers and external power supplies. In establishing these test procedures, the Secretary shall consider, among other factors, existing test procedures used for measuring energy consumption in standby mode and assess the current and projected future market for battery chargers and external power supplies. This assessment shall include estimates of the significance of potential energy savings from technical improvements to these products and suggested product classes for standards. Prior to the end of this time period, the Secretary shall hold a scoping workshop to discuss and receive comments on plans for devel-

oping energy conservation standards for standby mode energy use for these products.

''(B) The Secretary shall, within 3 years after the date of enactment of this subsection, issue a final rule that determines whether energy conservation standards shall be promulgated for battery chargers and external power supplies or classes thereof. For each product class, any such standards shall be set at the lowest level of standby energy use that—

''(i) meets the criteria of subsections (o), (p), (q), (r), (s) and (t); and

''(ii) will result in significant overall annual energy savings, considering both standby mode and other operating modes.

''(2) DESIGNATION OF ADDITIONAL COVERED PRODUCTS.—(A) Not later than 180 days after the date of enactment of this subsection, the Secretary shall publish for public comment and public hearing a notice to determine whether any noncovered products should be designated as covered products for the purpose of instituting a rulemaking under this section to determine whether an energy conservation standard restricting standby mode energy consumption, should be promulgated; except that any restric-

tion on standby mode energy consumption shall be limited to major sources of such consumption.

''(B) In making the determinations pursuant to subparagraph (A) of whether to designate new covered products and institute rulemakings, the Secretary shall, among other relevant factors and in addition to the criteria in section 322(b), consider—

''(i) standby mode power consumption compared to overall product energy consumption; and

''(ii) the priority and energy savings potential of standards which may be promulgated under this subsection compared to other required rulemakings under this section and the available resources of the Department to conduct such rulemakings.

''(C) Not later than 1 year after the date of enactment of this subsection, the Secretary shall issue a determination of any new covered products for which he intends to institute rulemakings on standby mode pursuant to this section and he shall state the dates by which he intends to initiate those rulemakings.

''(3) REVIEW OF STANDBY ENERGY USE IN COVERED PRODUCTS.—In determining pursuant to

section 323 whether test procedures and energy conservation standards pursuant to this section should be revised, the Secretary shall consider for covered products which are major sources of standby mode energy consumption whether to incorporate standby mode into such test procedures and energy conservation standards, taking into account, among other relevant factors, the criteria for non-covered products in subparagraph (B) of paragraph (2) of this subsection.

''(4) RULEMAKING FOR STANDBY MODE.—(A) Any rulemaking instituted under this subsection or for covered products under this section which restricts standby mode power consumption shall be subject to the criteria and procedures for issuing energy conservation standards set forth in this section and the criteria set forth in subparagraph (B) of paragraph (2) of this subsection.

''(B) No standard can be proposed for new covered products or covered products in a standby mode unless the Secretary has promulgated applicable test procedures for each product pursuant to section 323.

''(C) The provisions of section 327 shall apply to new covered products which are subject to the

rulemakings for standby mode after a final rule has been issued.

''(5) EFFECTIVE DATE.—Any standard promulgated under this subsection shall be applicable to products manufactured or imported 3 years after the date of promulgation.

''(6) VOLUNTARY PROGRAMS TO REDUCE STANDBY MODE ENERGY USE.—The Secretary and the Administrator shall collaborate and develop programs, including programs pursuant to section 324A (relating to Energy Star Programs) and other voluntary industry agreements or codes of conduct, which are designed to reduce standby mode energy use.

''(v) SUSPENDED CEILING FANS, VENDING MACHINES, UNIT HEATERS, AND COMMERCIAL REFRIGERATORS, FREEZERS AND REFRIGERATOR-FREEZERS.—The Secretary shall within 24 months after the date on which testing requirements are prescribed by the Secretary pursuant to section 323(f), prescribe, by rule, energy conservation standards for suspended ceiling fans, refrigerated bottled or canned beverage vending machines, unit heaters, and commercial refrigerators, freezers and refrigerator-freezers. In establishing standards under this subsection, the Secretary shall use the criteria and proce-

dures contained in subsections (l) and (m). Any standard prescribed under this subsection shall apply to products manufactured 3 years after the date of publication of a final rule establishing such standard.

''(w) ILLUMINATED EXIT SIGNS.—Illuminated exit signs manufactured on or after January 1, 2005 shall meet the Version 2.0 Energy Star Program performance requirements for illuminated exit signs prescribed by the Environmental Protection Agency

''(x) TORCHIERES.—Torchieres manufactured on or after January 1, 2005—

''(1) shall consume not more than 190 watts of power; and

''(2) shall not be capable of operating with lamps that total more than 190 watts.

''(y) LOW VOLTAGE DRY-TYPE TRANSFORMERS.—The efficiency of low voltage dry-type transformers manufactured on or after January 1, 2005 shall be the Class I Efficiency Levels for low voltage dry-type transformers specified in Table 4–2 of the 'Guide for Determining Energy Efficiency for Distribution Transformers' published by the National Electrical Manufacturers Association (NEMA TP–1–1996).

''(z) TRAFFIC SIGNAL MODULES.—Traffic signal modules manufactured on or after January 1, 2006 shall

meet the performance requirements used under the Energy Star program of the Environmental Protection Agency for traffic signals, as in effect on the date of enactment of this paragraph, and shall be installed with compatible, electrically-connected signal control interface devices and conflict monitoring systems.

''(aa) EFFECTIVE DATE OF SECTION 327.—The provisions of section 327 shall apply to products for which standards are set in subsections (v) through (z) of this section after the effective date for such standards.''.

SEC. 1046. ENERGY LABELING.

(a) RULEMAKING ON EFFECTIVENESS OF CONSUMER PRODUCT LABELING.—Paragraph (2) of section 324(a) of the Energy Policy and Conservation Act (42 U.S.C. 6294(a)(2)) is amended by adding at the end the following:

''(F) Not later than 3 months after the date of enactment of this subparagraph, the Commission shall initiate a rulemaking to consider the effectiveness of the current consumer products labeling program in assisting consumers in making purchasing decisions and improving energy efficiency and to consider changes to the labeling rules that would improve the effectiveness of consumer product labels. Such rulemaking shall be completed within

2 years after the date of enactment of this subparagraph.''.

(b) RULEMAKING ON LABELING FOR ADDITIONAL PRODUCTS.—Section 324(a) of the Energy Policy and Conservation Act (42 U.S.C. 6294(a)) is further amended by adding at the end the following:

''(5) The Secretary or the Commission, as appropriate, may for covered products referred to in subsections (u) through (z) of section 325, prescribe, by rule, pursuant to this section, labeling requirements for such products after a test procedure has been set pursuant to section 323.''.

SEC. 1047. STUDY OF ENERGY EFFICIENCY STANDARDS.

The Secretary of Energy shall contract with the National Academy of Sciences for a study, to be completed within 1 year of enactment of this Act, to examine whether the goals of energy efficiency standards are best served by measurement of energy consumed, and efficiency improvements, at the actual site of energy consumption, or through the full fuel cycle, beginning at the source of energy production. The Secretary shall submit the report to the Congress.